



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/627,492	07/25/2003	Gregg E. Skow	H0003921	4206
128	7590	04/20/2006	EXAMINER	
HONEYWELL INTERNATIONAL INC. 101 COLUMBIA ROAD P O BOX 2245 MORRISTOWN, NJ 07962-2245			LOVEL, KIMBERLY M	
			ART UNIT	PAPER NUMBER
			2167	
DATE MAILED: 04/20/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	10/627,492	SKOW, GREGG E.
	Examiner Kimberly Lovel	Art Unit 2167

– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 25 July 2003.
- 2a) This action is FINAL.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-49 is/are pending in the application.
- 4a) Of the above claim(s) 30-36 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-29 and 37-49 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 25 July 2003 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>17 October 2005</u> .	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

**DETAILED ACTION**

1. This communication is responsive to the Amendment filed 27 March 2006.
2. Claims 1-49 are pending in this application. Claims 1, 15, 30, 37 and 49 are independent claims. In the Amendment filed 25 July 2003, Group I was elected which includes claims 1-29 and 37-49. This action is made Non-Final.

***Election/Restrictions***

3. Regarding the restriction, Group I, which includes claims 1-29 and 37-49 was elected without traverse. Therefore, Group II, which includes claims 30-36 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected group, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 27 March 2006.

***Information Disclosure Statement***

4. The information disclosure statement (IDS) submitted on 17 October 2005 was filed after the mailing date of the application on 25 July 2003. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

***Drawings***

5. The drawings are objected to because Fig 2 labels an item as 202-4, which according to page 7, paragraph [0028], line 8 should be labeled as 202-N. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 101***

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 1 recites a database that is compatible with multiple end-user systems, comprising: a data section that includes a plurality of data records; and a structure section that includes at least a feature mask, the feature mask including data that indicates whether a particular one of the data records is compatible with one or more of the end-user systems.

A database is considered to represent software per se. Software per se fails to produce a tangible result. In order for the subject matter to be considered tangible, it must produce a useful, concrete and tangible result.

### ***Claim Rejections - 35 USC § 102***

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claim 49 rejected under 35 U.S.C. 102(e) as being anticipated by US Patent No 6,804,664 to Hartman et al (hereafter Hartman et al).

**Referring to claim 49**, Hartman et al disclose a flight management system (see column 6, line 66-column 7, line 1 – the GPS is considered to represent the system), comprising:

Memory (see column 6, lines 59-60);

a navigation database stored in the memory (see column 6, line 59 – column 7, line 3), the navigation database compatible with multiple flight management systems and including:

a data section that includes a plurality of navigational data records (see column 6, line 59 – column 7, line 3), and a structure section that includes a feature mask, the feature mask including data that indicates whether a particular one of the navigational data records is compatible with one or more of the flight management systems (see column 9, line 44 – column 10, line 28 – the bit mask is considered to represent the *feature mask*; the bit mask of the query profile is compared to the bit mask of the record and if they match, then the two are considered to be compatible); and

a processor configured to generate an aircraft flight plan based at least in part on the navigational data stored in the navigation database (see column 6, line 66-column 7, line 1 – the GPS is considered to represent the processor).

### ***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1- 29 and 37-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No 6,879,976 to Brookler et al (hereafter Brookler et al) in view of US Patent No 6,804,664 to Hartman et al.

**Referring to claim 1**, Brookler et al disclose a database. In particular, Brookler et al disclose a database that is compatible with multiple end-user systems (see column 4, lines 54-61), comprising:

a data section that includes a plurality of data records (see column 4, lines 54-57; Fig 2, item 6; and Fig 3, item 300 – the Products Table, which is one of the tables in the *data section*, has 5 records, which is considered to represent a *plurality of records*); and

a structure section (see column 4, lines 54-57 – the schema is considered to represent the structure section; according to the 5<sup>th</sup> Edition of Microsoft's Computer Dictionary, a schema defines aspects of the database, such as attributes, domains and parameters of the attributes) that includes at least a feature mask, the feature mask including data that indicates whether a particular one of the data records is compatible with one or more of the end-user systems.

However, Brookler et al fail to explicitly teach the further limitation of a feature mask. Hartman et al teach a similar database (see abstract), including at least a feature mask, the feature mask including data that indicates whether a particular one of the data records is compatible with one or more of the end-user systems (see column 9, line 44 – column 10, line 28 – the bit mask is considered to represent the *feature mask*; the bit mask of the query profile is compared to the bit mask of the record and if they match, then the two are considered to be compatible).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize Hartman et al's concept of a feature mask as a feature Brookler et al's database . One would have been motivated to do so to increase the

efficiency of retrieving query results from an indexed data set (Brookler et al: see column 1, lines 48-57).

**Referring to claim 2,** the combination of Brookler et al and Hartman et al (hereafter Brookler/Hartman) discloses the database of claim 1, wherein:

each data record has one or more features associated therewith (Hartman et al: see column 5, lines 3-14); and

the feature mask data indicates whether each feature of a data record is compatible with one or more of the end-user systems (Hartman et al: see column 9, line 44 – column 10, line 28 – the bit mask is considered to represent the *feature mask*; the bit mask of the query profile is compared to the bit mask of the record and if they match, then the two are considered to be compatible).

**Referring to claim 3,** Brookler/Hartman discloses the database of claim 2, wherein:

each data record includes at least a feature field containing one or more feature bits that represent each of the features associated therewith (Hartman et al: see column 5, lines 3-14); and

the feature mask includes one or more feature mask records, each feature mask record including at least one or more compatibility fields each containing one or more bits that indicate whether a particular one of the data records is compatible with one or more of the end-user systems (Hartman et al: see column 9, line 44 – column 10, line 28 – the bit mask is considered to represent the *feature mask*; the bit mask of the query

profile is compared to the bit mask of the record and if they match, then the two are considered to be compatible).

**Referring to claim 4**, Brookler/Hartman discloses the database of claim 1, wherein:

the data section comprises a plurality of data tables, each data table including a plurality of the data records (Brookler et al: see column 4, lines 54-57; Fig 2, item 6; and Fig 3 – *the plurality of data tables* are represented by the Products Table, the Manufacturers Table and the Categories Table; the Products Table, which is one of the tables in the *data section*, has 5 records, which is considered to represent a *plurality of records*); and

the structure section comprises a plurality of features masks, each feature mask at least associated with one of the data tables and including data that indicates whether a particular one of the data records in an associated data table is compatible with one or more of the end-user systems (Hartman et al: see column 9, line 44 – column 10, line 28 – the bit mask is considered to represent the *feature mask*; the bit mask of the query profile is compared to the bit mask of the record and if they match, then the two are considered to be compatible).

**Referring to claim 5**, Brookler/Hartman discloses the database of claim 4, wherein:

each data record in each data table includes at least a feature field containing one or more feature bits that represent each of the features associated therewith (Hartman et al: see column 5, lines 3-14);

and each feature mask includes a plurality of feature mask records, each feature mask record including at least one or more feature mask values that indicate whether a particular one of the data records in the associated data table is compatible with one or more of the end-user systems (Hartman et al: see column 9, line 44 – column 10, line 28 – the bit mask is considered to represent the *feature mask*; the bit mask of the query profile is compared to the bit mask of the record and if they match, then the two are considered to be compatible).

**Referring to claim 6**, Brookler/Hartman discloses the database of claim 1, wherein the structure section further comprises a system identification table that includes data that uniquely identifies each of the end-user systems (Hartman et al: see column 6, lines 25-38 and column 7, lines 16-26 – the user profile and client profile databases are considered to represent the information that *uniquely identifies each of the end-user systems*).

**Referring to claim 7**, Brookler/Hartman discloses the database of claim 6, wherein the system identification table comprises a plurality of system identification records, each system identification record associated with each of the end-user systems (Brookler et al: see column 7, lines 16-26 – client profiles include information such as software versions, processor type, processor speed, memory size, modem type, etc.; the client profiles are related to the user profiles).

**Referring to claim 8**, Brookler/Hartman discloses the database of claim 1, wherein:

the data section comprises a plurality of data tables, each data table including a plurality of the data records (Brookler et al: see column 4, lines 54-57; Fig 2, item 6; and Fig 3 – *the plurality of data tables* are represented by the Products Table, the Manufacturers Table and the Categories Table; the Products Table, which is one of the tables in the *data section*, has 5 records, which is considered to represent a *plurality of records*); and

the structure section further comprises a table pointer table that includes data that uniquely describes at least each of the data tables (Hartman et al: see column 7, lines 37-43).

**Referring to claim 9**, Brookler/Hartan discloses the database of claim 8, wherein: the table pointer table comprises a plurality of table pointer records; and at least one table pointer record is associated with each of the data tables (Hartman et al: see column 7, lines 37-48).

**Referring to claim 10**, Brookler/Hartman discloses the database of claim 9, wherein each table pointer record includes data representative of at least: a location of the associated data table; a number of the data records in the associated table (Brookler et al: see column 6, lines 10-24); and a size of each data record in the associated data table.

**Referring to claim 11**, Brookler/Hartman discloses the database of claim 1, wherein:

each data record includes one or more fields (Brookler et al: see column 5, lines 53-54 and Fig 3, item 300 – the fields are product ID, description, manufacturer and category); and

the structure section further comprises a field definition table that includes at least data representative of each of the data record fields (Brookler et al: see column 5, lines 56-59 – the lookup table is considered to represent *the field definition table*).

**Referring to claim 12**, Brookler/Hartman discloses the database of claim 11, wherein the structure section further comprises one or more return type tables, each return type table including data representative of a format of each of the data record fields (Hartman et al: see column 4, lines 35-39).

**Referring to claim 13**, Brookler/Hartman discloses the database of claim 1, further comprising: a header section that includes data representative of indicia that is used to identify the database (Hartman et al: see column 4, lines 47-54).

**Referring to claim 14**, Brookler/Hartman discloses the database of claim 13, wherein the header section further includes data representative of a location of the structure section (Hartman et al: see column 4, lines 35-54).

**Referring to claim 15**, Brookler et al discloses a method of generating a database. In particular, Brookler et al disclose a method of generating a database that is compatible with multiple end-user systems (see column 4, lines 54-61), the method comprising the steps of:

generating a data section (see column 4, lines 54-57; Fig 2, item 6; and Fig 3, item 300);

storing a plurality of data records in the data section (see column 4, lines 54-57; Fig 2, item 6; and Fig 3, item 300 – the Products Table, which is one of the tables in the *data section*, has 5 records, which is considered to represent a *plurality of records*); and generating a feature mask that includes data that indicates whether a particular one of the stored data records is compatible with one or more of the end-user systems.

However, Brookler et al fail to explicitly teach the further limitation of a feature mask. Hartman et al teach a similar method (see abstract), including generating a feature mask that includes data that indicates whether a particular one of the stored data records is compatible with one or more of the end-user systems (see column 9, line 44 – column 10, line 28 – the bit mask is considered to represent the *feature mask*; the bit mask of the query profile is compared to the bit mask of the record and if they match, then the two are considered to be compatible).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize Hartman et al's concept of a feature mask as a feature Brookler et al's database . One would have been motivated to do so to increase the efficiency of retrieving query results from an indexed data set (Brookler et al: see column 1, lines 48-57).

**Referring to claim 16**, Brookler/Hartman discloses the method of claim 15, further comprising:

associating one or more features with each data record (Hartman et al: see column 5, lines 3-14), wherein, the feature mask data indicates whether each feature of a data record is compatible with one or more of the end-user systems (Hartman et al:

see column 9, line 44 – column 10, line 28 – the bit mask is considered to represent the *feature mask*; the bit mask of the query profile is compared to the bit mask of the record and if they match, then the two are considered to be compatible).

**Referring to claim 17**, Brookler/Hartman discloses the method of claim 16 further comprising:

including at least a feature field in each data record (Hartman et al: see column 5, lines 3-14);

supplying each feature field with one or more feature bits that represent each of the features associated therewith (Hartman et al: see column 5, lines 3-14);

including one or more feature mask records in the feature mask (Hartman et al: see column 9, line 44 – column 10, line 28 – the bit mask is considered to represent the *feature mask*; the bit mask of the query profile is compared to the bit mask of the record and if they match, then the two are considered to be compatible); and

supplying each feature mask record with one or more feature mask values that indicate whether a particular one of the data records is compatible with one or more of the end-user systems (Hartman et al: see column 9, line 44 – column 10, line 28 – the bit mask is considered to represent the *feature mask*; the bit mask of the query profile is compared to the bit mask of the record and if they match, then the two are considered to be compatible).

**Referring to claim 18**, Brookler/Hartman discloses the method of claim 15, further comprising:

dividing the data section into a plurality of data tables that each include a plurality of the data records (Brookler et al: see column 4, lines 54-57; Fig 2, item 6; and Fig 3 – *the plurality of data tables* are represented by the Products Table, the Manufacturers Table and the Categories Table; the Products Table, which is one of the tables in the *data section*, has 5 records, which is considered to represent a *plurality of records*); and

generating a plurality of features masks that are each at least associated with one of the data tables and that each include data indicative of whether a particular one of the data records in an associated data table is compatible with one or more of the end-user systems (Hartman et al: see column 9, line 44 – column 10, line 28 – the bit mask is considered to represent the *feature mask*; the bit mask of the query profile is compared to the bit mask of the record and if they match, then the two are considered to be compatible).

**Referring to claim 19**, Brookler/Hartman discloses the method of claim 18, further comprising:

including at least a feature field in each data record in each data table (Hartman et al: see column 5, lines 3-14);

supplying each feature field with one or more feature bits that represent each of the features associated therewith (Hartman et al: see column 5, lines 3-14); and

including one or more feature mask records in the feature mask; and supplying each feature mask record with one or more feature mask values that indicate whether a particular one of the data records in the associated data table is compatible with one or more of the end-user systems (Hartman et al: see column 9, line 44 – column 10, line

28 – the bit mask is considered to represent the *feature mask*; the bit mask of the query profile is compared to the bit mask of the record and if they match, then the two are considered to be compatible).

**Referring to claim 20**, Brookler/Hartman discloses the method of claim 15, further comprising: generating a system identification table that includes data that uniquely identifies each of the end-user systems (Hartman et al: see column 6, lines 25-38 and column 7, lines 16-26 – the user profile and client profile databases are considered to represent the information that *uniquely identifies each of the end-user systems*).

**Referring to claim 21**, Brookler/Hartman discloses the method of claim 20, further comprising: including a plurality of system identification records in the system identification table, each system identification record associated with each of the end-user systems (Brookler et al: see column 7, lines 16-26 – client profiles include information such as software versions, processor type, processor speed, memory size, modem type, etc.; the client profiles are related to the user profiles).

**Referring to claim 22**, Brookler/Hartman discloses the method of claim 15, further comprising:

dividing the data section into a plurality of data tables that each include a plurality of the data records (Brookler et al: see column 4, lines 54-57; Fig 2, item 6; and Fig 3 – *the plurality of data tables* are represented by the Products Table, the Manufacturers Table and the Categories Table; the Products Table, which is one of the tables in the *data section*, has 5 records, which is considered to represent a *plurality of records*); and

generating a table pointer table that includes data that uniquely describes at least each of the data tables (Hartman et al: see column 7, lines 37-48).

**Referring to claim 23**, Brookler/Hartman discloses the method of claim 22 further comprising: including a plurality of table pointer records in the table pointer table, at least one table pointer record is associated with each of the data tables (Hartman et al: see column 7, lines 37-48).

**Referring to claim 24**, Brookler/Hartman discloses the method of claim 23, further comprising: supplying each table pointer record with data representative of at least (i) a location of the associated data table, (ii) a number of the data records in the associated table (Brookler et al: see column 6, lines 10-24) and (iii) a size of each data record in the associated data table.

**Referring to claim 25**, Brookler/Hartman discloses the method of claim 15, further comprising:

including one or more fields in each data record (Brookler et al: see column 5, lines 53-54 and Fig 3, item 300 – the fields are product ID, description, manufacturer and category); and

generating a field definition table that includes at least data representative of each of the data record fields (Brookler et al: see column 5, lines 56-59 – the lookup table is considered to represent *the field definition table*).

**Referring to claim 26**, Brookler/Hartman discloses the method of claim 25, further comprising: generating one or more return type tables, each return type table

including data representative of a format of each of the data record fields (Hartman et al: see column 4, lines 35-39).

**Referring to claim 27**, Brookler/Hartman discloses the method of claim 15, further comprising:

generating a structure section and including the feature mask therein (Hartman et al: see column 4, lines 35-39);

generating a header section (Hartman et al: see column 4, lines 35-39); and supplying the header section with data representative of indicia that is used to identify the database (Hartman et al: see column 4, lines 35-39).

**Referring to claim 28**, Brookler/Hartman discloses the method of claim 27, wherein the header section further includes data representative of a location of the structure section (Hartman et al: see column 4, lines 35-39).

**Referring to claim 29**, Brookler/Hartman discloses the method of claim 15, further comprising:

including at least a feature field in each data record (Brookler et al: see column 5, lines 53-54 and Fig 3, item 300 – the fields are product ID, description, manufacturer and category);

supplying each feature field with data representative of one or more features associated with each data record, wherein the feature field of the data record having the requested data is compared with at least a portion of the feature mask to determine whether the requested data is compatible with the end-user system (Hartman et al: see column 9, line 44 – column 10, line 28 – the bit mask is considered to represent the

*feature mask*; the bit mask of the query profile is compared to the bit mask of the record and if they match, then the two are considered to be compatible).

**Referring to claim 37**, Brookler et al disclose a computer system. In particular, Brookler et al disclose a computer system (see column 4, lines 15-61), comprising:  
a processor (see column 4, lines 32-44);  
memory in operable communication with the processor (see column 4, lines 48-61); and

a database stored in the memory, the database compatible with multiple end-user systems (see column 4, lines 54-61) and including:

a data section that includes a plurality of data records (see column 4, lines 54-57; Fig 2, item 6; and Fig 3, item 300), and a structure section (see column 4, lines 54-57) that includes a feature mask, the feature mask including data that indicates whether a particular one of the data records is compatible with one or more of the end-user systems.

However, Brookler et al fail to explicitly teach the further limitation of a feature mask. Hartman et al teach a similar database (see abstract), including a feature mask, the feature mask including data that indicates whether a particular one of the data records is compatible with one or more of the end-user systems (see column 9, line 44 – column 10, line 28 – the bit mask is considered to represent the *feature mask*; the bit mask of the query profile is compared to the bit mask of the record and if they match, then the two are considered to be compatible).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize Hartman et al's concept of a feature mask as a feature Brookler et al's database . One would have been motivated to do so to increase the efficiency of retrieving query results from an indexed data set (Brookler et al: see column 1, lines 48-57).

**Referring to claim 38**, Brookler/Hartman discloses the system of claim 37, wherein:

each data record has one or more features associated therewith (Hartman et al: see column 5, lines 3-14); and

the feature mask data indicates whether each feature of a data record is compatible with one or more of the end-user systems (Hartman et al: see column 9, line 44 – column 10, line 28 – the bit mask is considered to represent the *feature mask*; the bit mask of the query profile is compared to the bit mask of the record and if they match, then the two are considered to be compatible).

**Referring to claim 39**, Brookler/Hartman discloses the system of claim 37, wherein:

each data record includes at least a feature field containing one or more feature bits that represent each of the features associated therewith (Hartman et al: see column 5, lines 3-14); and

the feature mask includes one or more feature mask records, each feature mask record including at least one or more compatibility fields each containing one or more bits that indicate whether a particular one of the data records is compatible with one or

more of the end-user systems (Hartman et al: see column 9, line 44 – column 10, line 28 – the bit mask is considered to represent the *feature mask*; the bit mask of the query profile is compared to the bit mask of the record and if they match, then the two are considered to be compatible).

**Referring to claim 40**, Brookler/Hartman discloses the system of claim 37, wherein:

the data section comprises a plurality of data tables, each data table including a plurality of the data records (Brookler et al: see column 4, lines 54-57; Fig 2, item 6; and Fig 3 – *the plurality of data tables* are represented by the Products Table, the Manufacturers Table and the Categories Table; the Products Table, which is one of the tables in the *data section*, has 5 records, which is considered to represent a *plurality of records*); and

the structure section comprises a plurality of features masks, each feature mask at least associated with one of the data tables and including data that indicates whether a particular one of the data records in an associated data table is compatible with one or more of the end-user systems (Hartman et al: see column 9, line 44 – column 10, line 28 – the bit mask is considered to represent the *feature mask*; the bit mask of the query profile is compared to the bit mask of the record and if they match, then the two are considered to be compatible).

**Referring to claim 41**, Brookler/Hartman discloses the system of claim 40, wherein:

each data record in each data table includes at least a feature field containing one or more feature bits that represent each of the features associated therewith (Hartman et al: see column 5, lines 3-14); and

each feature mask includes a plurality of feature mask records, each feature mask record including at least one or more compatibility fields each containing one or more bits that indicate whether a particular one of the data records in the associated data table is compatible with one or more of the end-user systems (Hartman et al: see column 9, line 44 – column 10, line 28 – the bit mask is considered to represent the *feature mask*; the bit mask of the query profile is compared to the bit mask of the record and if they match, then the two are considered to be compatible).

**Referring to claim 42**, Brookler/Hartman discloses the system of claim 37, wherein the structure section further comprises a system identification table that includes data that uniquely identifies each of the end-user systems (Hartman et al: see column 6, lines 25-38 and column 7, lines 16-26 – the user profile and client profile databases are considered to represent the information that *uniquely identifies each of the end-user systems*).

**Referring to claim 43**, Brookler/Hartman discloses the system of claim 42, wherein the system identification table comprises a plurality of system identification records, each system identification record associated with each of the end-user systems (Brookler et al: see column 7, lines 16-26 – client profiles include information such as software versions, processor type, processor speed, memory size, modem type, etc.; the client profiles are related to the user profiles).

**Referring to claim 44**, Brookler/Hartman discloses the system of claim 37, wherein:

the data section comprises a plurality of data tables, each data table including a plurality of the data records (Brookler et al: see column 4, lines 54-57; Fig 2, item 6; and Fig 3 – *the plurality of data tables* are represented by the Products Table, the Manufacturers Table and the Categories Table; the Products Table, which is one of the tables in the *data section*, has 5 records, which is considered to represent a *plurality of records*); and

the structure section further comprises a table pointer table that includes data that uniquely describes at least each of the data tables (Hartman et al: see column 7, lines 37-43).

**Referring to claim 45**, Brookler/Hartman discloses the system of claim 44, wherein: the table pointer table comprises a plurality of table pointer records; and at least one table pointer record is associated with each of the data tables (Hartman et al: see column 7, lines 37-43).

**Referring to claim 46**, Brookler/Hartman discloses the system of claim 45, wherein each table pointer record includes data representative of at least: a location of the associated data table; a number of the data records in the associated table (Brookler et al: see column 6, lines 10-24); and a size of each data record in the associated data table.

**Referring to claim 47**, Brookler/Hartman discloses the database of claim 37, wherein:

each data record includes one or more fields (Brookler et al: see column 5, lines 53-54 and Fig 3, item 300 – the fields are product ID, description, manufacturer and category); and

the structure section further comprises a field definition table that includes at least data representative of each of the data record fields (Brookler et al: see column 5, lines 56-59 – the lookup table is considered to represent *the field definition table*).

**Referring to claim 48**, Brookler/Hartman discloses the system of claim 47, wherein the structure section further comprises one or more return type tables, each return type table including data representative of a format of each of the data record fields (Hartman et al: see column 4, lines 35-39).

### ***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- US Patent No 5,649,181 to French et al titled "Method and Apparatus for Indexing Database Columns with Bit Vectors"

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimberly Lovel whose telephone number is (571) 272-2750. The examiner can normally be reached on 8:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kimberly Lovel  
Examiner  
Art Unit 2167

kml  
13 April 2006



JOHN BREENE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100

BC